

Study for the treatment optimization of nail disorders

/ Research objectives

Managing nail disorders is one of the most highly specialized fields in dermatology, and can be difficult for many dermatologists. The Department of Dermatology at Keio University Hospital has one of the few outpatient clinics for nail disorders in Japan, and more than 200 patients visit the clinic every month from all over Japan. The dermatologists have abundant expertise and clinical experience in terms of a variety of nail disorders, which enable them to accurately diagnose and appropriately treat patients. The purpose of this study is to verify the existing therapies for various nail disorders and to optimize them with the aim of developing new treatment modalities.

/ Research outlines

Since the establishment of our clinic for nail disorders, we have been conducting clinical research on ingrown toenail treatment for over 10 years. As a result, an orthotic device developed in collaboration with a company was launched nationwide in 2019 and was highly evaluated. In addition, a phase III clinical trial for a nail softener that can enhance the therapeutic effect and shorten the treatment period of this orthotic device is underway (as of May 2021).

In inflammatory nail disorders such as nail psoriasis, inflammation occurs in the nail matrix and nail bed, resulting in changes in the shape and color of the nail plate and functional impairment. We have devised a method for topical treatment using an occlusive dressing technique and have demonstrated substantial evidence of its effectiveness. We are currently investigating drug selection and treatment duration using this new method.

Various tumors develop in the nail units. It is desirable to avoid nail deformities after surgical excision, especially in cases of benign tumors. Therefore, we are re-examining the existing surgical techniques and are working to make them less invasive.